



## SYSTEM AND METHOD FOR GENERATING AND PRESENTING MULTI-MODAL APPLICATIONS FROM INTENT-BASED MARKUP SCRIPTS

### ABSTRACT OF THE DISCLOSURE

Systems and methods for rendering modality-independent scripts (e.g.,  
5 intent-based markup scripts) in a multi-modal environment and, in particular, to a  
multi-modal user interface for an application, whereby the user can interact with the  
application using a plurality of modalities (e.g., speech and GUI). The multi-modal  
interface automatically synchronizes I/O events over the plurality of modalities presented.  
In one aspect, the system provides immediate, synchronized rendering of the  
10 modality-independent document in each of the supported modalities. In another aspect,  
the system provides deferred rendering and presentation of intent-based scripts to an end  
user, wherein the system comprises a transcoder for generating a speech markup language  
script (such as a VoiceXML document) from the modality-independent script and  
rendered (via, e.g., VoiceXML browser) at a later time.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Dantzig et al.

Docket: YOR9-2001-0261US1 (8728-507) #3

Serial No.: 09/876,714

Filed: June 6, 2001

For: SYSTEM AND METHOD FOR GENERATING AND  
PRESENTING MULTI-MODAL APPLICATIONS FROM  
INTENT-BASED MARKUP SCRIPTSAssistant Commissioner for Patents  
Washington, DC 20231RESPONSE TO NOTICE TO FILE MISSING PARTS  
OF NONPROVISIONAL APPLICATION

Sir:

In response to the Notice to File Missing Parts dated August 8, 2001, Applicant encloses herewith: (1) a properly executed original Declaration/Power of Attorney; (2) four sheets of formal drawings; (3) a substitute Abstract; and (4) a copy of the Notice to File Missing Parts.

Please charge the required fee of \$130.00 to cover the surcharge under 37 C.F.R. §1.16(e) to Deposit Account No. 50-0510/IBM (Yorktown Heights). Also, in the event any additional extensions of time are required, please treat this paper as a petition to extend the time as required and charge Deposit Account No. 50-0510/IBM. **TWO (2) COPIES OF THIS SHEET ARE ENCLOSED.**

Respectfully submitted,

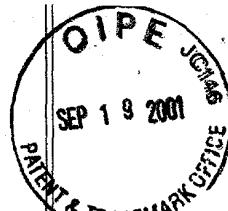
  
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CERTIFICATE OF MAILING UNDER 37 C.F.R. §1.8(a)

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail, postpaid in an envelope, addressed to the: Assistant Commissioner for Patents, Washington, D.C. 20231 on September 14, 2001.

Dated: 9/14/01  
Frank V. DeRosa



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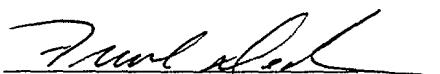
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## UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS  
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 WASHINGTON, D.C. 20231  
 www.uspto.gov

APPLICATION NUMBER	FILING/RECEIPT DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NUMBER
09/876,714	06/07/2001	Paul M. Dantzig	Y0R9-2001-0261US1 (8728-5

CONFIRMATION NO. 9392

## FORMALITIES LETTER



\*OC000000006398362\*

F. CHAU & ASSOCIATES, LLP  
 Suite 501  
 1900 Hempstead Turnpike  
 East Meadow, NY 11554

Date Mailed: 08/08/2001

## NOTICE TO FILE MISSING PARTS OF NONPROVISIONAL APPLICATION

FILED UNDER 37 CFR 1.53(b)

*Filing Date Granted*

An application number and filing date have been accorded to this application. The item(s) indicated below, however, are missing. Applicant is given **TWO MONTHS** from the date of this Notice within which to file all required items and pay any fees required below to avoid abandonment. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

- The oath or declaration is missing.  
*A properly signed oath or declaration in compliance with 37 CFR 1.63, identifying the application by the above Application Number and Filing Date, is required.*
- To avoid abandonment, a late filing fee or oath or declaration surcharge as set forth in 37 CFR 1.16(e) of \$130 for a non-small entity, must be submitted with the missing items identified in this letter.
- **The balance due by applicant is \$ 130.**

The application is informal since it does not comply with the regulations for the reason(s) indicated below.

The required item(s) identified below must be timely submitted to avoid abandonment:

- Substitute drawings in compliance with 37 CFR 1.84 because:
  - drawing sheets do not have the appropriate margin(s) (see 37 CFR 1.84(g)). Each sheet must include a top margin of at least 2.5 cm. (1 inch), a left side margin of at least 2.5 cm. (1 inch), a right side margin of at least 1.5 cm. (5/8 inch), and a bottom margin of at least 1.0 cm. (3/8 inch);
- An Abstract not to exceed 150 words in length, commencing on a separate sheet (37 CFR 1.72(b)).

09/20/2001 MBELETE1 00000003 500510 09876714 *A copy of this notice MUST be returned with the reply.*

A.T

Customer Service Center

Initial Patent Examination Division (703) 308-1202

PART 2 - COPY TO BE RETURNED WITH RESPONSE